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# NOTICE OF ALLOWANCE AND FEE(S) DUE

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7590

02/24/2010

SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213 EXAMINER

KLINKEL, KORTNEY L

ART UNIT

PAPER NUMBER

1611

DATE MAILED: 02/24/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,290	05/09/2005	Toshiyuki Takasu	Q87757	9818

TITLE OF INVENTION: REMEDY FOR OVERACTIVE BLADDER COMPRISING ACETIC ACID ANILIDE DERIVATIVE AS THE ACTIVE INGREDIENT

APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 05/24/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificat	correspondence including ed below or directed other tions.	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of many specifying a new corresp	pondence address;	ll be r and/or	nailed to the current (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
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							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTOF	RNEY DOCKET NO.	CONFIRMATION NO.
10/534,290 FITLE OF INVENTION INGREDIENT	05/09/2005 N: REMEDY FOR OV	VERACTIVE BLADDER	Toshiyuki Takasu R COMPRISING ACETIC	C ACID ANILIDE	DER	Q87757 IVATIVE AS THE	9818 ACTIVE
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	05/24/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
KLINKEL, KORTNEY L		1611	514-370000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.	ND RESIDENCE DATA less an assignee is identi h in 37 CFR 3.11. Comp	" Indication form led. Use of a Customer A TO BE PRINTED ON T	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be particular or type data will appear on the part a substitute for filing an a (B) RESIDENCE: (CITY)	ely, e firm (having as a regent) and the name neys or agents. If norinted.  e) tent. If an assignerassignment.	membes of uponame	er a 2 to to e is 3 entified below, the de	ocument has been filed for
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Cor	poratio	on or other private gro	oup entity Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
a. Applicant claims	<b>tus</b> (from status indicated s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than the Office.	e applicant; a regis	tered a	ttorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No.			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450. Alexandria, V	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but irreinia 22313-1450 DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary to NOT SEND FEES OR	on is required to obtain or re 1.14. This collection is esti depending upon the indivi e Chief Information Office.	etain a benefit by th mated to take 12 m dual case. Any con r, U.S. Patent and T DTHIS ADDRESS	e publi inutes nments 'radem SENT	to which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa D.TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents P.O. Box 1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/534,290	05/09/2005	Toshiyuki Takasu	Q87757	9818		
65565 75	590 02/24/2010		EXAMINER			
SUGHRUE-2655	SUGHRUE-265550			KLINKEL, KORTNEY L		
2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213			ART UNIT	PAPER NUMBER		
			1611			
			DATE MAILED: 02/24/2010			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 44 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 44 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
Notice of Allowability	10/534,290 <b>Examiner</b>	TAKASU ET AL.  Art Unit	
·			
	Kortney L. Klinkel	1611	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED ) or other appropriate commater (Commater application is application is	in this application. If not included nunication will be mailed in due cour	se. <b>THIS</b>
1. $\boxtimes$ This communication is responsive to <u>the RCE filed 10/5/20</u>	009 and supplemental resp	onse filed 11/23/2009.	
2. ☑ The allowed claim(s) is/are <u>1-12</u> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority u</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>	•	or (f).	
2.   Certified copies of the priority documents have	e been received in Applicati	on No	
3. $\square$ Copies of the certified copies of the priority do	ocuments have been receive	ed in this national stage application f	rom the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the require	ments
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv			CE OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mu	st be submitted.		
(a) including changes required by the Notice of Draftsper	son's Patent Drawing Revie	w ( PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date	's Amendment / Comment o	or in the Office action of	
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in			k) of
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT</li> </ol>			the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 Notice of I	nformal Patent Application	
<ol> <li>Notice of References Cited (FTO-692)</li> <li>Dotice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	<u> </u>	Summary (PTO-413),	
	Paper No	./Mail Date	
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>1/5/2010</u>, <u>1/29/2010</u></li> </ol>	7. ∐ Examiner's	s Amendment/Comment	
4.   Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's	s Statement of Reasons for Allowan	ce
of Biological Material	9.		
		<u> </u>	
		atent Examiner, Art Unit 1611	

## **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/5/2009 has been entered.

Claims 1 and 6 were amended. Claims 1-12 are pending.

## Information Disclosure Statements

Acknowledgement is made of applicant's submitting information disclosure statements on 1/5/2010 and 1/29/2010. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

# Double Patenting—Withdrawn

The rejection of claims 1-12 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over reference claims 1-12 of U.S. Patent 6,346,532 ('532), in view of Ladouceur et al. (U.S. Patent 6,699,860), and in further view of Akaha et al. (JP 2001114736) is withdrawn in light of the claim amendments and

unexpected results provided in the specification and substantiated in the supplemental response dated 11/23/2009.

# Claim Rejections - 35 USC § 103—Withdrawn

The rejection of claims 1-4, 6-9, and 11-12 under 103(a) as being unpatentable over Maruyama et al. (WO99/20607; equivalent English translation U.S. Patent 6,346,532 B1), in view of Ladouceur et al. (U.S. Patent 6,699,860) as well as the rejection of claims 5 and 10 under 103(a) as being unpatentable over Maruyama et al. (WO99/20607; equivalent English translation U.S. Patent 6,346,532 B1), in view of Ladouceur et al. (U.S. Patent 6,699,860), and further in view of Akaha et al. (JP 2001114736) is withdrawn in light of the claim amendments and unexpected results provided in the specification and substantiated in the supplemental response dated 11/23/2009.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: The claimed methods are novel and non-obvious over the teachings of the prior art. The closest prior art is considered to be Maruyama et al. (WO 99/20607 as translated by US 6346532). Maruyama et al. teaches the claimed compound and teaches that it is a  $\beta$ 3 agonist which is useful for treating a number of conditions (obesity, hyperglycemia, hyperlipidemia), but Maruyama et al. do not teach that this compound is useful at treating overactive bladder. Ladouceur et al. (U.S. Patent 6699860) as well as

Yamaguchi (" $\beta_3$ -adrenoceptors in human detrusor muscle" Urology, 2002, 59, 25-29, supplied by applicant in the IDS dated 1/5/2010) both teach that targeting the  $\beta 3$  receptor is a means of treating overactive bladder. However, the results provided by applicant in the specification beginning at page 17, which are substantiated by the Badawi et al. ("Relaxant effects of  $\beta$ -adrenergic agonists on porcine and human detrusor muscle" Acta Physiol. Scand. 2005, 185, 151-159) and Igawa et al. (Functional and molecular biological evidence for a possible  $\beta_3$ -adrenoceptor in the human detrusor muscle" British Journal of Pharmacology, 1999, 126, 819-825) references submitted by applicant in a supplemental response dated 11/23/2009, show that the claimed compound exhibits unexpected results when used to treat overactive bladder over the state of the art  $\beta 3$  agonists.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

Claims 1-12 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kortney L. Klinkel whose telephone number is (571)270-5239. The examiner can normally be reached on Monday-Friday 8am to 5pm.

Application/Control Number: 10/534,290

Art Unit: 1611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KLK

/Sharmila Gollamudi Landau/ Supervisory Patent Examiner, Art Unit 1611